

## Particle Size Analysis (CT 202)

Client: Arqlite  
 Project: Lab Testing Services  
 Project No.: 12315  
 Sample ID: S040221-110  
 Material Description: Regular  
 Sample Location: Arqlite - Santa Ana

Date Sampled: 04/02/21  
 Sampled By: Client  
 Date Tested: 04/06/21  
 Tested By: C. Fuentes  
 Date Reviewed: 04/06/21  
 Reviewed By: R. Jimenez

Dry Weight, g 2,570

Sieve Size	Weight Retained Grams	Percent Retained %	Percent Passing %	Specification
3" (75mm)	0	0	100	-
2" (50mm)	0	0	100	-
1 1/2" (37.5mm)	0	0	100	-
1" (25mm)	0	0	100	-
3/4" (19mm)	0	0	100	-
1/2" (12.5mm)	2,214	86	14	-
3/8" (9.5mm)	2,560	100	0	-
#4 (4.75mm)	2,570	100	0	-

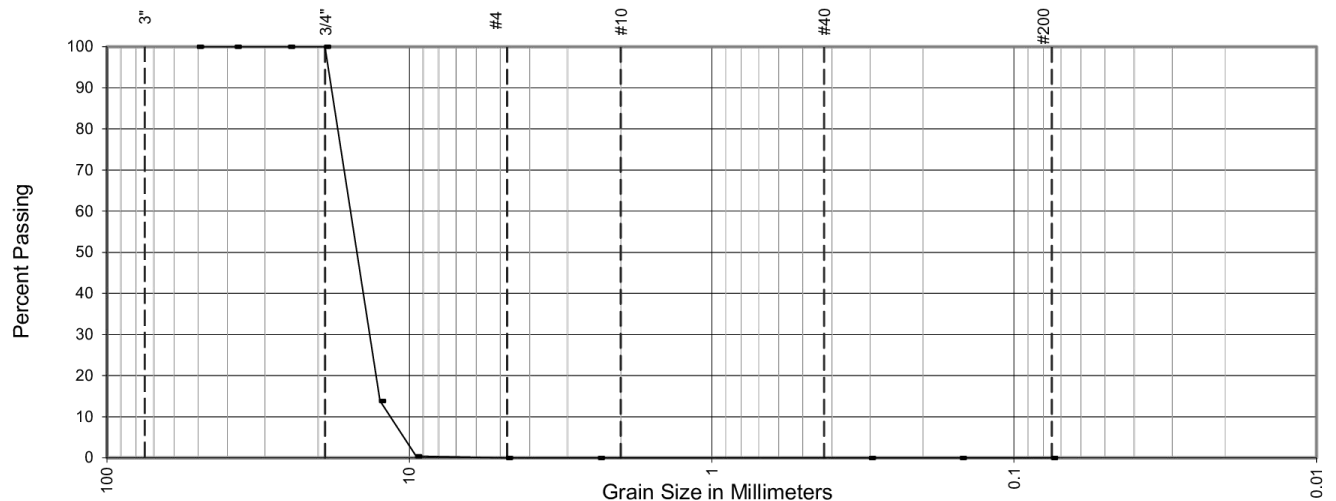
Dry Weight, g 0.0

#8 (2.36mm)	0.0	#DIV/0!	#DIV/0!	-
#16 (1.18mm)	0.0	#DIV/0!	#DIV/0!	-
#30 (600um)	0.0	#DIV/0!	#DIV/0!	-
#50 (300um)	0.0	#DIV/0!	#DIV/0!	-
#100 (150um)	0.0	#DIV/0!	#DIV/0!	-
#200 (75um)	0.0	#DIV/0!	#DIV/0!	-

D <sub>10</sub>	0.30
D <sub>30</sub>	0.55
D <sub>60</sub>	1.50

C <sub>u</sub>	#DIV/0!
C <sub>c</sub>	#DIV/0!

Fineness Modulus	#DIV/0!
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Soil Classification:	-
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Remarks:

## Specific Gravity - Coarse Aggregate (ASSHTO T85)

Client:	Arqlite	Date Sampled:	4/2/2021
Project:	Lab Testing Services	Sampled By:	Client
Project No.:	12315	Date Tested:	04/07/21
Sample ID:	S040221-110	Tested By:	C. Fuentes
Sample Location:	Arqlite Santa Ana	Date Reviewed:	04/07/21
Material Description:	Regular	Reviewed By:	R. Jimenez

Sample No.		Specification
Dry Weight in Air (A)	2263.6	
SSD Weight in Air (B)	2322.6	
Weight in Water (C)	-624.5	
Bulk Specific Gravity (A/(B-C))	0.768	
Bulk Specific Gravity - SSD (B/(B-C))	0.788	
Specific Gravity - Apparent (A/(A-C))	0.784	
Absorption ((B-A)/A*100)	2.6	

Remarks:

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## Durability Index (CT 229)

Client:	Arqlite	Date Sampled:	04/02/21
Project:	Lab Testing Services	Sampled By:	Client
Project No.:	12315	Date Tested:	5/3/2021
Sample ID:	S040221-110	Tested By:	C. Fuentes
Material Description:	Regular	Date Reviewed:	5/4/2021
Sample Location:	Arqlite - Santa Ana	Reviewed By:	R. Jimenez

	Sand Reading	Clay Reading	Durability Index	Specifications
Durability Index - Fines			N/A	
	Sediment Height		Durability Index	
Durability Index - Coarse	0.0		100	
Durability Index			100	

Remarks: - Material tested was retained on 1/2" sieve.

**Soundness of Coarse Aggregates**  
(ASTM C88)

Client:	Arqlite	Date Sampled:	4/2/2021
Project:	Lab Testing Services	Sampled By:	Client
Project Number:	12315	Date Tested:	Various
Sample ID:	S040221-110	Tested By:	J. Uranga
Sample Location:	Arqlite - Santa Ana	Date Reviewed:	6/4/2021
Material Description:	Regular	Reviewed By:	R. Jimenez

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Aggregate Test Sizes	Weighted Average Loss, %	Specifications
3/4" - 3/8", (Sodium Sulfate)	0.0	
3/4" - 3/8", (Magnesium Sulfate)	0.0	

Remarks:

## Particle Size Analysis (CT 202)

Client: Arqlite  
 Project: Lab Testing Services  
 Project No.: 12315  
 Sample ID: S040221-111  
 Material Description: Mini  
 Sample Location: Arqlite - Santa Ana

Date Sampled: 04/02/21  
 Sampled By: Client  
 Date Tested: 04/06/21  
 Tested By: C. Fuentes  
 Date Reviewed: 04/06/21  
 Reviewed By: R. Jimenez

Dry Weight, g 1,107

Sieve Size	Weight Retained Grams	Percent Retained %	Percent Passing %	Specification
3" (75mm)	0	0	100	-
2" (50mm)	0	0	100	-
1 1/2" (37.5mm)	0	0	100	-
1" (25mm)	0	0	100	-
3/4" (19mm)	0	0	100	-
1/2" (12.5mm)	0	0	100	-
3/8" (9.5mm)	336	30	70	-
#4 (4.75mm)	1,104	100	0	-

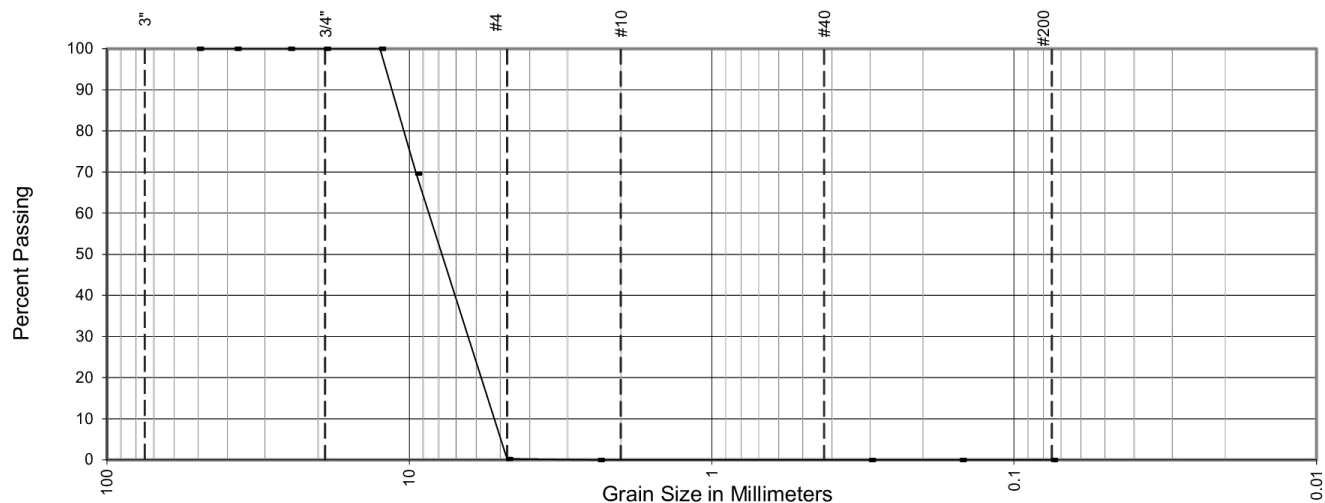
Dry Weight, g 0.0

#8 (2.36mm)	1,107.0	100	0	-
#16 (1.18mm)				-
#30 (600um)				-
#50 (300um)				-
#100 (150um)				-
#200 (75um)				-

D <sub>10</sub>	0.30
D <sub>30</sub>	0.55
D <sub>60</sub>	1.50

C <sub>u</sub>	5.00
C <sub>c</sub>	0.67

Fineness Modulus	6.30
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Soil Classification:	-
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Remarks:

## Specific Gravity - Coarse Aggregate (ASSHTO T85)

Client:	Arqlite	Date Sampled:	4/2/2021
Project:	Lab Testing Services	Sampled By:	Client
Project No.:	12315	Date Tested:	04/07/21
Sample ID:	S040221-111	Tested By:	C. Fuentes
Sample Location:	Arqlite Santa Ana	Date Reviewed:	04/07/21
Material Description:	Mini	Reviewed By:	R. Jimenez

Sample No.		Specification
Dry Weight in Air (A)	1071.2	
SSD Weight in Air (B)	1130.0	
Weight in Water (C)	-530.4	
Bulk Specific Gravity (A/(B-C))	0.645	
Bulk Specific Gravity - SSD (B/(B-C))	0.681	
Specific Gravity - Apparent (A/(A-C))	0.669	
Absorption ((B-A)/A*100)	5.5	

Remarks:

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## Durability Index (CT 229)

Client:	Arqlite	Date Sampled:	04/02/21
Project:	Lab Testing Services	Sampled By:	Client
Project No.:	12315	Date Tested:	5/3/2021
Sample ID:	S040221-111	Tested By:	C. Fuentes
Material Description:	Mini	Date Reviewed:	5/4/2021
Sample Location:	Arqlite - Santa Ana	Reviewed By:	R. Jimenez

	Sand Reading	Clay Reading	Durability Index	Specifications
Durability Index - Fines			N/A	
	Sediment Height		Durability Index	
Durability Index - Coarse	0.0		100	
Durability Index			100	

Remarks: - Material tested was retained on 3/8" and #4 sieve.

**Soundness of Coarse Aggregates**  
(ASTM C88)

Client:	Arqlite	Date Sampled:	4/2/2021
Project:	Lab Testing Services	Sampled By:	Client
Project Number:	12315	Date Tested:	Various
Sample ID:	S040221-111	Tested By:	J. Uranga
Sample Location:	Arqlite - Santa Ana	Date Reviewed:	6/4/2021
Material Description:	Mini	Reviewed By:	R. Jimenez

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Aggregate Test Sizes	Weighted Average Loss, %	Specifications
3/4" - 3/8", 3/8" - #4 (Sodium Sulfate)	0.0	
3/4" - 3/8", 3/8" - #4 (Magnesium Sulfate)	1.0	

Remarks:



## Particle Size Analysis (CT 202)

Client: Arqlite  
 Project: Lab Testing Services  
 Project No.: 12315  
 Sample ID: S040221-112  
 Material Description: Micro-Mini  
 Sample Location: Arqlite - Santa Ana

Date Sampled: 04/02/21  
 Sampled By: Client  
 Date Tested: 04/06/21  
 Tested By: C. Fuentes  
 Date Reviewed: 04/06/21  
 Reviewed By: R. Jimenez

Dry Weight, g 1,103

Sieve Size	Weight Retained Grams	Percent Retained %	Percent Passing %	Specification
3" (75mm)	0	0	100	-
2" (50mm)	0	0	100	-
1 1/2" (37.5mm)	0	0	100	-
1" (25mm)	0	0	100	-
3/4" (19mm)	0	0	100	-
1/2" (12.5mm)	0	0	100	-
3/8" (9.5mm)	0	0	100	-
#4 (4.75mm)	18	2	98	-

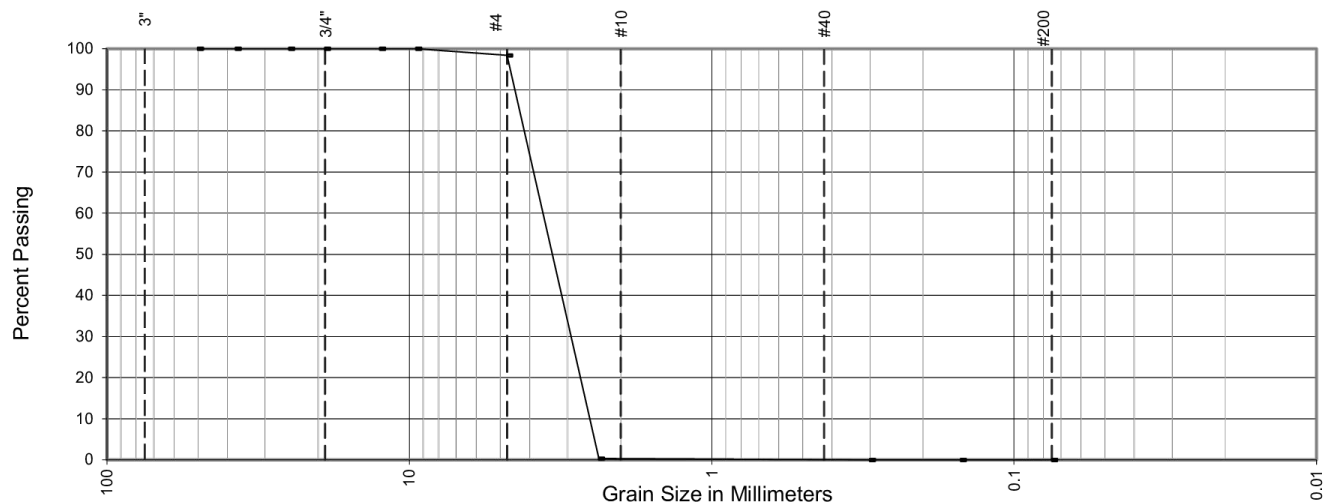
Dry Weight, g 0.0

#8 (2.36mm)	1,099.8	100	0	-
#16 (1.18mm)	1,103.0	100	0	-
#30 (600um)	0.0	0	0	-
#50 (300um)	0.0	0	0	-
#100 (150um)	0.0	0	0	-
#200 (75um)	0.0	0	0	-

D <sub>10</sub>	0.30
D <sub>30</sub>	0.55
D <sub>60</sub>	1.50

C <sub>u</sub>	5.00
C <sub>c</sub>	0.67

Fineness Modulus	5.01
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Soil Classification:	-
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Remarks:

## Specific Gravity - Coarse Aggregate (ASSHTO T85)

Client:	Arqlite	Date Sampled:	4/2/2021
Project:	Lab Testing Services	Sampled By:	Client
Project No.:	12315	Date Tested:	04/07/21
Sample ID:	S040221-112	Tested By:	C. Fuentes
Sample Location:	Arqlite Santa Ana	Date Reviewed:	04/07/21
Material Description:	Micro-Mini	Reviewed By:	R. Jimenez

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Sample No.		Specification
Dry Weight in Air (A)	921.6	
SSD Weight in Air (B)	1104.4	
Weight in Water (C)	-205.7	
Bulk Specific Gravity (A/(B-C))	0.703	
Bulk Specific Gravity - SSD (B/(B-C))	0.843	
Specific Gravity - Apparent (A/(A-C))	0.818	
Absorption ((B-A)/A*100)	19.8	

Remarks:

## Durability Index (CT 229)

Client:	Arqlite	Date Sampled:	04/02/21
Project:	Lab Testing Services	Sampled By:	Client
Project No.:	12315	Date Tested:	5/3/2021
Sample ID:	S040221-112	Tested By:	C. Fuentes
Material Description:	Micro-Mini	Date Reviewed:	5/4/2021
Sample Location:	Arqlite - Santa Ana	Reviewed By:	R. Jimenez

	Sand Reading	Clay Reading	Durability Index	Specifications
Durability Index - Fines			N/A	
	Sediment Height		Durability Index	
Durability Index - Coarse	0.0		100	
Durability Index			100	

Remarks: - Material tested was retained on #4 sieve.

**Soundness of Coarse Aggregates**  
(ASTM C88)

Client:	Arqlite	Date Sampled:	4/2/2021
Project:	Lab Testing Services	Sampled By:	Client
Project Number:	12315	Date Tested:	Various
Sample ID:	S040221-112	Tested By:	J. Uranga
Sample Location:	Arqlite - Santa Ana	Date Reviewed:	06/04/2021
Material Description:	Micro-Mini	Reviewed By:	R. Jimenez

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Aggregate Test Sizes	Weighted Average Loss, %	Specifications
#4 - #8 (Sodium Sulfate)	0.0	
#4 - #8 (Magnesium Sulfate)	0.0	

Remarks: